

# IOWA STATE UNIVERSITY

## Digital Repository

---

International Textile and Apparel Association  
(ITAA) Annual Conference Proceedings

2013: Regeneration, Building a Forward Vision

---

Jan 1st, 12:00 AM

## Anti-Theft Travel Bag Design: Advantage, Interest, and Satisfaction

Siyuan Han  
*Auburn University*

Helen Koo  
*Auburn University*

Follow this and additional works at: [https://lib.dr.iastate.edu/itaa\\_proceedings](https://lib.dr.iastate.edu/itaa_proceedings)



Part of the [Fashion Business Commons](#), [Fashion Design Commons](#), and the [Fiber, Textile, and Weaving Arts Commons](#)

---

Han, Siyuan and Koo, Helen, "Anti-Theft Travel Bag Design: Advantage, Interest, and Satisfaction" (2013). *International Textile and Apparel Association (ITAA) Annual Conference Proceedings*. 13.

[https://lib.dr.iastate.edu/itaa\\_proceedings/2013/presentations/13](https://lib.dr.iastate.edu/itaa_proceedings/2013/presentations/13)

This Event is brought to you for free and open access by the Conferences and Symposia at Iowa State University Digital Repository. It has been accepted for inclusion in International Textile and Apparel Association (ITAA) Annual Conference Proceedings by an authorized administrator of Iowa State University Digital Repository. For more information, please contact [digirep@iastate.edu](mailto:digirep@iastate.edu).



## **Anti-Theft Travel Bag Design: Advantage, Interest, and Satisfaction**

Siyuan Han and Helen Koo

Auburn University, USA

Key words: anti-theft, design, travel bag, tourism

**Introduction/Significance.** Theft around the world continues to rise (Travelling Overseas, 2012). Tourists have always been easy targets for thieves (Holcomb & Pizam, 2006). Data released by the U.S. Office of Travel and Tourism Industries (OTTI) show that the total number of U.S. citizens travelling abroad in 2011 increased by 76% since 2001. These statistics give us a sign that more and more tourists are at risk of theft, especially bag theft, which is one of the most prominent crimes against tourists (Holcomb & Pizam, 2006). Several travel bag brands have launched anti-theft travel bag product lines with the aim of effectively protecting and preventing the increasing number of travelers from bag thefts. However, research into the investigation of tourists' perceptions of and attitudes toward the existing designs of anti-theft products is scarce. Therefore, the valuable reviews from consumers and travelers, who are also potential consumers, have not been fully explored and understood. Gaps between consumers' perceptions of anti-theft bag designs and the practical design of anti-theft bags on the market might exist. The objectives of this study are as follows: (a) to investigate the existing designs for anti-theft travel bags based on their functions; (b) to understand consumers' attitudes toward and perceptions of the functions of anti-theft designs; and (c) to identify important design factors for anti-theft bag development. The findings of this study are expected to offer comprehensive insights that will allow manufacturers and retailers to better understand their consumers' thoughts on anti-theft designs.

**Theoretical Framework /Literature.** The researchers were guided by situational crime prevention theory (Clarke, 1997), which suggests that one of the ways to prevent crime is to systematically and permanently incorporate the immediate environment into design to increase risk and difficulty to criminals. Bag theft cases were reviewed from extent literature and major bag theft behaviors were identified, for example, dip, grab, slash, and electronic pickpockets. To understand consumers' perceptions of and attitudes toward anti-theft travel bag design, consumers' satisfaction levels, personal involvement/interests, the product's relative advantages, and the design's relevance factors were selected and tested.

**Methods.** The researchers conducted market research on consumers' perceptions of the designs of anti-theft travel bags that are sold on the retailing market to accomplish the first objective of this research. To achieve the second and third objectives, an online questionnaire consisting of open- and closed-ended questions about consumers' perceptions on anti-theft travel bags,

including demographics questions, were asked. The images and descriptive sentences about the seven bag designs were provided to the participant. The consumers' perceptions, such as perceptions of advantages (Rijsdijk, Hultink, & Diamantopoulos, 2007) and relevant design factors (Jain & Srinivasan, 1990); attitude, such as personal interest (Zaichkowsky, 1985); and satisfaction level (Rijsdijk, Hultink, & Diamantopoulos, 2007) with these designs were collected and measured using a five-point Likert scale. The survey was conducted on 200 volunteers (80 male, 120 female), all of whom were college students, as these individuals represent one of the major targets for tourism and bag markets (U.S. Bureau of Labor Statistics, September, 2012). The collected data were analyzed by conducting descriptive analyses, such as frequency and mean, Cronbach's alpha coefficient, *t*-test, and ANOVA. In addition, important themes were extracted from the analysis of open and color coding systems.

**Results/Conclusions.** The results identified consumers' perceptions of the existing designs of anti-theft travel bags and provided the designers with useful and practical suggestions during the bag design process for traveling. The refined design will be capable of building barriers to criminals and can effectively prevent and control travel bag theft incidents.

### References

- Clarke, R.V. (1997). Situational crime prevention: Successful case studies. Guilderland, NY: Harrow and Heston.
- Holcomb, J., & Pizam, A. (2006). Do theft affect tourist destination decision? In Y. Mansfeld, & A. Pizam (Eds.), *Tourism, security and safety: From theory to practice* (pp. 105-124). Burlington, MA: Elsevier Butterworth-Heinemann.
- Jain, K., & Srinivasan, N. (1990). An empirical assessment of multiple operationalizations of involvement. *Advances in Consumer Research*, 17, 594-602.
- Rijsdijk, S. A., Hultink, E. J., & Diamantopoulos, A. (2007). Product intelligence: Its conceptualization, measurement and impact on consumer satisfaction. *Journal of the Academy of Marketing Science*, 35(3), 340-356. doi: 10.1007/s11747-007-0040-6.
- The Wall Street Journal Live (2012, September). *Travelling overseas? Hold on to your wallet*. Retrieved from <http://on.aol.com/video/worst-travel-destinations-due-to-pickpocketing-517483343>.
- U.S. Bureau of Labor Statistics (2012). *Consumer Expenditure Survey*, Retrieved from <http://www.bls.gov/cex/2011/Standard/age.pdf>.
- U.S. Office of travel and tourism industries (2012). *Outbound overview*. Retrieved from [http://tinet.ita.doc.gov/outreachpages/outbound.general\\_information.outbound\\_overview.Html](http://tinet.ita.doc.gov/outreachpages/outbound.general_information.outbound_overview.Html).
- Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, 12(3), 341-352.